```
Hydrophobic
                                                               Hydrophilic
                 -2
 1
     0.00
 2
     0.00
 3
    -0.15
    -0.29
 5
    -0.71
 6
    -1.38
 7
    -1.49
    -1.61
 9
    -1.47
10
    -1.30
11
    -0.88
12
    -1.23
13
    -1.10
    -0..75
14
15
    -0.75
                                 ====== F
16
    -0.17
17
      0.30
                                            S
18
      0.65
19
      0.87
20
      0.73
21
      0.83
22
      0.33
                                            S
23
    -0.13
                                           A
24
    -0.02
                                         = P
25
    -0.15
26
    -0.02
                                            Q
27
    -0.25
                                            S
28
     0.25
                                            A ===
29
     0.13
                                            S
30
    -0.22
                                        == I
31
      0.37
                                            K ====
32
      0.35
33
     0.57
34
     0.10
                                            R =
35
    -0.12
                                          = N
36
      0.68
                                            A ======
37
      0.68
38
      1.15
39
      1.73
40
      1.75
41
      2.08
42
43
      0.70
44
      0.13
                                            Ν
45
     0.13
46
    -0.22
47
    -0.63
48
    -0.05
                                            D
49
      0.75
50
      1.32
```

```
51
       1.32
       1.55
 52
 53
       1.63
 54
       1.17
 55
       0.42
 56
       0.42
                                            Ι
 57
      -0.08
 58
       0.02
                                            V
 59
       0.32
                                            K ===
 60
     -0.10
                                          = G
 61
      -0.10
                                          = N
 62
      -0.57
                                    ===== G
 63
     -0.52
                                     ===== Y
 64
      -0.55
 65
      -0.05
                                            Q
                                            S
 66
      -0.08
 67
       0.17
                                            Ρ
       0.17
 68
                                            R
       0.17
 69
                                            F
 70
       0.18
                                            Ρ
      -0.32
 71
                                        === N
 72
       0.60
                                            S
 73
       0.63
                                            У
 74
       0.30
                                            P
                                               ===
 75
      -0.05
                                            R
 76
      -0.37
 77
      -0.43
 78
      -1.50
 79
      -1.03
 80
      -1.03
 81
      -0.82
 82
      -0.47
 83
      -0.37
                                       ==== L
       0.70
 84
                                            H ======
 85
       0.23
                                            S
 86
       0.47
 87
       1.05
                                               ==========
 88
       0.70
 89
       0.70
 90
     -0.10
                                          = R
 91
      -0.38
                                            I
 92
      -0.73
 93
      -0.73
 94
      -0.40
 95
      -0.40
                                       ==== F
 96
      -0.52
                                      ==== D
 97
      -0.27
                                        === N
 98
      -0.15
                                          = Q
 99
      -0.15
                                            F
       0.32
100
                                            G ===
       0.20
101
                                            L
       1.12
102
                                            Ε
103
       1.15
104
       1.95
```

```
105
      1.15
                                           E =========
106
      0.48
                                           N =====
107
      1.07
                                           D =========
108
      0.18
109
      0.65
110
     -0.27
                                      === R
111
     -0.22
                                       == Y
112
      0.45
                                           D =====
113
     -0.30
                                      === F
114
      0.58
115
      0.58
116
      0.70
117
      1.00
      1.00
118
119
      1.18
120
      0.73
                                           S
121
      0.17
                                           E ==
122
      0.17
                                           T ==
123
     -0.18
                                       == S
124
     -0.18
                                       == T
125
     -0.12
                                         = I
126
      0.33
                                           I ===
127
     -0.17
                                       ==R
128
     -0.03
                                           G
      0..27
129
                                           R ===
130
     -0.32
                                      === W
131
      0.18
                                           C ==
132
      0.18
                                           G == ::
133
      0.50
                                           H =====
134
      0.67
135
      0.67
136
      1.25
137
      0.45
138
      0.45
                                           Ρ
139
      0.75
140
      1.25
141
      1.18
142
      0.72
                                           S
143
      1.05
                                           R ========
144
      0.25
145
      0.70
                                           Ν
146
     -0.10
                                         = Q
147
     -0.10
                                         = I
148
     -0.55
                                    ===== K
149
     -0.08
                                         = I
150
      0.27
                                           \mathbf{T}
                                             ===
151
      0.27
                                           F ===
152
      1.07
153
      0.75
                                           S
154
      0.75
                                           D
155
      0.00
                                           D
     -0.13
156
                                         = Y
157
     -0.13
                                         = F
                                   ===== V
158
     -0.63
```

```
-0.25
159
                                    ===A
160
    -0.25
                                    === K
161
     0.50
                                         P =====
162
     0.28
                                         G ===
163
     -0.60
164
     -0.98
165
     -0.93
166
     -0.82
167
     -1.62
168
     -0.82
169
     0.07
                                         L =
170
      0.03
                                         L
171
      0.02
                                         Ε
172
      0.32
                                         D ===
173
      0.53
                                         F
174
     -0.05
                                        Q
175
     -0.63
                                        Ρ
176
     -0.17
                                      == A
     0.30
177
178
      0.23
                                         A ==
      0.35
179
180 0.27
181
      0.85
182
      0.85
   ~ 0.10
183
184 0.10
                                         Ε
185
      0.12
186
      0.33
187
    -0.47
188
    -1.08
189
     -0.83
190
     -1.02
191
     -1.02
192
     -1.45
193
     -1.12
194
     -0.50
195
     -0.50
196
     -0.20
                                      == N
197
     -0.50
                                  ==== S
198
     -0.18
199
     0.28
                                         S ===
    0.23
200
                                         V ==
201
      0.17
                                         T ==
202
    -0.18
203
     -0.23
204
     -0.25
                                    === T
205
     -0.25
206
     -0.33
                                    === I
     -0.57
207
                                 ===== A
208
      0.23
                                         D = =
209
      1.03
210
      1.62
211
      0.82
212
      0.82
```

```
Ž13
      1.62
214
      0.70
215
      0.70
                                      A ======
216
      0.13
217
      0.18
218
      0.77
                                      D
219
      0.77
220
      0.88
221
      0.08
222
      0.65
                                      D
223
      0.52
224
     -0.40
                                 ==== L
225
     -0.87
                            ======= K
     -0.57
226
                               ===== Y
227
     0.23
                                      F
     -0.22
228
                                   == N
229
     0.00
                                      P
230
      0.45
                                      E ====
231
      0.92
232
      1.42
                                       233
      0.62
234
      1.07
235
      1.27
                                      D
236
      1.02
237
      0.13
                                      Ε
238
     -0.67
                              ====== N
239
     0.13
                                      M =
240
     -0.43
                                ==== Y
     -0.47
241
                               ===== L
242
      0.25
                                      D ===
243
      0.65
244
      1.45
245
      0.95
246
      1.52
247
      1.57
248
      1.08
                                      G
249
      0.98
                                      R =======
250
      0.98
251
      1.48
252
      1.48
253
      1.48
254
      1.97
                                      255
      1.80
256
      1.80
257
      1.00
                                      K =======
258
      1.00
259
      1.45
260
      0.65
261
      0.93
262
      0.93
263
      1.73
264
      1.15
265
      1.15
266
      1.95
```

```
267
       1.93
268
      1.48
269
       0.82
270
      0.83
271
       0.33
272
      0.33
                                           C
273
      0.35
                                           \mathbf{T}
274
      0.32
      0.53
275
                                           R
276
      0.35
                                           Ν
277
      0.38
278
     -0.42
                                     ==== S
                                           V
279
      0.05
280
      0.53
                                           N =====
281
      0.98
                                           Ι
282
      0.93
                                             ========
283
      1.40
284
      1.40
285
      0.82
      0.35
286
                                           K
287
     -0.40
                                     ==== L
288
     -0.35
289
     -1.27
290
     -1.38
291
     -1.30
292
     -0.83
293
     ·-0.75
294
     -0.80
     -0.68
295
296
     -0.52
297
     -0.48
298
     -0.48
299
     -0.48
                                    ===== V
300
     -0.18
                                       == 0
301
      0.12
                                           R =
302
      0.40
                                           C ====
      0.20
303
                                           G
304
     -0.30
                                      === G
305
     -0.30
306
     -0.87
     -0.93
307
308
     -1.22
309
     -1.02
310
     -1.58
311
     -0.92
312
     -0.30
                                      ===N
313
     -0.40
                                     ==== W
314
     -0.22
                                       ==R
315
     -0.42
                                     ==== S
316
      0.18
                                           С
317
     -0.27
                                      === T
318
     -0.32
                                      === C
319
       0.35
                                           N ====
320
       0.35
                                           S ====
```

```
321
       0.27
                                           G ===
322
       0.73
                                           K ======
323
       1.18
                                             =========
324
       1.20
325
       0.62
326
       1.18
327
       1.18
                                             ==========
328
       0.38
329
      -0.08
                                         = E
330
      -0.52
                                    ===== V
331
       0.07
                                           L =
332
      -0.43
                                     ==== Q
333
      -0.18
                                       == F
334
       0.03
                                           Ε
335
      -0.30
                                      === P
336
       0.62
                                           G ======
337
       0.62
338
       1.12
339
       1.12
340
       1.70
341
       1.92
342
       1.92
343
       1:35
344
       0.63
345
       0.55
346
      -0.25
347
     -0.42
                                     ==== M
348
      -0.42
      -0.65
349
                                  ====== L
350
      -0.40
                                     ==== V
351
      -0.62
                                   ===== D
352
       0.18
                                           I ==
353
       0.35
                                           Q
                                             ====
354
       0.17
355
       0.97
356
       1.43
357
       1.57
358
       1.57
359
       1.48
360
       0.87
361
       0.20
                                           D
      -0.14
362
                                         = C
363
       0.19
                                           Ι
364
       0.30
365
       0.58
366
       0.99
                                             ========
367
       1.77
368
       0.00
       0.00
369
370
       0.00
           Hydrophobic
                                                             Hydrophilic
```